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J. G. J.  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Hirofumi Yura et al.  
Serial No.: 09/937,510  
Filing Date: September 25, 2001  
Title: "METHOD FOR SELECTIVELY SEPARATING BLOOD  
CELLS BY USING LECTIN"  
Docket No.: 33947

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Box PCT  
Asst. Commissioner for Patents  
Washington, D.C. 20231

Sir/Madam:

Pursuant to Rule 56, applicants are aware of the publications listed in the European Search Report (copy enclosed) and in the enclosed copy of Patent Office Form 1449, along with a copy of each reference cited therein. In this Supplemental Information Disclosure Statement five (5) publications are listed:

- Publication 1: M. Kitagawa, et al., Prenatal Diagnosis, 22: 17-21 (2002)
- Publication 2: M. Kitagawa, et al., American J. Human Genetics, 67, 423 (2000)
- Publication 3: WO 97/26326
- Publication 4: WO 99/15628
- Publication 5: M.E.A. Pereira, et al., "Immunological Studies on Lectins and Their Application to the Fractionation", Critical Reviews in Immunology, 1, 33-78 (1979)

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Box PCT, Assistant Commissioner of Patents, Washington, D.C. 20231 on the date indicated below.

Jeffrey J. Sopko  
Name of Attorney for Applicant(s)

July 3, 2002  
Date

Signature of Attorney

The following information is provided regarding these publications:

Publications 1, 2 and 4 were published after the priority date of the present application. Furthermore, these do not disclose glycoconjugate polymers.

Publication 3 (WO 97/26326) describes a method for isolating bone and cartilage precursor cells from peripheral blood, bone marrow, and adipose tissue using antibodies and other reagents that recognize surface markers on CD34+ cells. Such reagents may be lectins including SBA. However, Publication 3 neither discloses nor suggests the use of glycoconjugate polymers in the present invention.

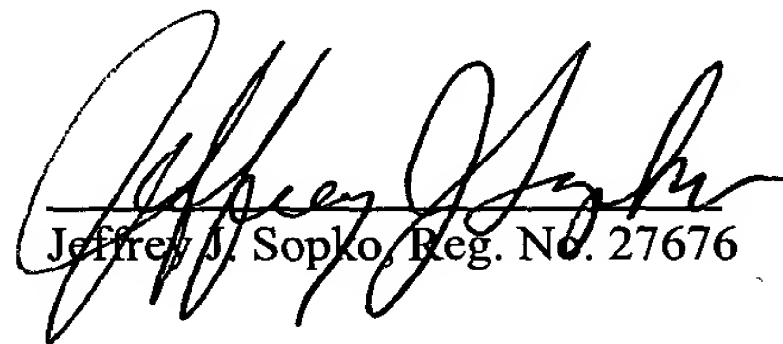
Publication 5 (Pereira, et al.) is a review of lectins and describes specific interaction between lectins and blood cells. However, Publication 5 neither discloses nor suggests the use of glycoconjugate polymers as in the present invention.

In conclusion, none of the publications describes the use of a combination of lectins and glycoconjugate polymer for specific of hematopoietic blood cells.

Respectfully submitted,

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By:



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|--|--|------------------------------------|--------------------------|
| Form PTO-1449  | U.S. DEPARTMENT OF COMMERCE<br>PATENT AND TRADEMARK OFFICE | ATTY. DOCKET NO.<br>33947          | SERIAL NO.<br>09/937,510 |
| INFORMATION DISCLOSURE CITATION<br>BY APPLICANT<br>(USE SEVERAL SHEETS IF NECESSARY) |  | APPLICANT:<br>Hirofumi Yura et al. |                          |
|  |  | FILING DATE:<br>September 25, 2001 | GROUP ART UNIT:          |

**U.S. PATENT DOCUMENTS**

| Examiner Initial |   | Document No. | Date | Name | Class | Subclass | Filing Date |
|------------------|---|--------------|------|------|-------|----------|-------------|
|                  | A |              |      |      |       |          |             |
|                  | B |              |      |      |       |          |             |
|                  | C |              |      |      |       |          |             |
|                  | D |              |      |      |       |          |             |
|                  | E |              |      |      |       |          |             |
|                  | F |              |      |      |       |          |             |

**FOREIGN PATENT DOCUMENTS**

|  |   | Document No. | Date    | Country | Class | Subclass | Translation  |
|--|---|--------------|---------|---------|-------|----------|--------------|
|  | G | WO 97/26326  | 07/1997 | PCT     |       |          | English Text |
|  | H | WO 99/15628  | 04/1999 | PCT     |       |          | English Text |
|  | I |              |         |         |       |          |              |
|  | J |              |         |         |       |          |              |

**OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)**

|  |   |  |
|--|---|--|
|  | K | Miercio E. A. Pereira and Elvin A. Kabat, "Immunochemical Studies on Lectins and Their Application to the Fractionation of Blood Group Substances and Cells", Critical Reviews in Immunology, November, 1979, pages 33-78.   |
|  | L | M. Kitagawa, K. Sugiura, T. Okuyama, K. Kanayama, M. Natori, D. Wakamatsu, H. Yura and H. Sago, "A New Method Using Lectin for Isolation of Fetal Cells from Maternal Blood", American Journal of Human Genetics, October 2000, page 423.  |
|  | M | Michihiro Kitagawa, Kentaro Sugiura, Hiroko Omi, Yoshiaki Akiyama, Kiyoko Kanayama, Masaru Shinya, Tadao Tanaka, Hirobumi Yura and Haruhiko Sago, "New Technique Using Galactose-Specific Lectin for Isolation of Fetal Cells from Maternal Blood", Prenatal Diagnosis, January 2002, pages 17-21. |

|           |                 |
|-----------|-----------------|
| Examiner: | Date Considered |
|-----------|-----------------|

\*Examiner: Initial if reference considered, regardless of whether citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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